### **Attachment F**

# **Driving School Association of the Americas' Beginner Driver Education and Training**

# **Curriculum Content Standards**



thedsaa.org

#### **Table of Contents**

#### **Preface**

Introduction

Standard 1 Recognizing and Managing Risk
Standard 2 The Vehicle and Its Components

Standard 3 Vehicle Handling

Standard 4 Perception and Risk Management

Standard 5 Rules of the Road
Standard 6 Driver Behaviors
Standard 7 Sharing the Road

Standard 8 Attention

Standard 9 Respect and Responsibility

**Appendix A – Required Topics: Examples** 

#### **Preface**

All across the United States you will find people learning to drive. Professional instruction to the beginning driver plays an important and valuable role in our society and we all benefit when drivers begin their driving careers with as much information and background as possible.

These standards were developed in collaboration with Sue McNeill of Road Safety Educators' Association (RSEA), Ontario, Canada. In December 2008, Sue lost a courageous battle with cancer leaving a legacy as an expert in road safety. The Driving School Association of the Americas is proud of the collaboration with Sue McNeill and RSEA that has resulted in this useful tool for curriculum planning and development.

Sue was acknowledged by academics and practitioners alike as a person who advocated for high standards in driver education and training. She had the unique ability to keep a common sense approach in establishing curriculum content standards, methods of training, and instructor competency guidelines.

The Driving School Association of the Americas' *Curriculum Content Standards* are intended to provide guidance towards the highest level of instruction that can be attained so that as people learn to drive in the United States they will pose the least risk possible to themselves and others and to help them remain crash- and violation-free in their driving careers.

#### Introduction

Driving is a complex and demanding skill. Every driver needs to be aware that knowledge of risk prevention and avoidance, understanding the vehicle, vehicle handling, perception and risk management, the highway transportation system (HTS) rules of road, interacting with other drivers, driver behavior, attention, and personal responsibility are an important foundation to becoming a safe driver.

Death from a motor vehicle crash is the number one "disease" for young people in the United States. Fatalities are not the only problem; injury crashes are epidemic as well.

In the United States, there are many professional curriculums for driver education and training programs to consider. DSAA's curriculum content standards will help identify a curriculum that targets the reasons for crashes.

These standards provide teaching objectives, topics, and knowledge outcomes and abilities, as well as examples of required topics and will help to prepare the beginning driver, parents and mentors, and all those who will support and interact with the driver as a driving career begins.

# **Standard 1 – Understanding and Managing Risk**

1. Understanding and Managing Risk
Purpose: To develop knowledge, appreciation, and skills related to perception and management of risk and how these skills and ability contribute to safe, responsible, and incident-free driving.

Teaching Objective	Topics	Knowledge Outcomes and Abilities
1A  ✓ Jurisdictional-specific process for obtaining the privilege to drive	Jurisdictional-specific process for obtaining the privilege to drive	Explain jurisdictional licensing processes and the risk of entering the driving population
1B  ✓ Accurate risk-perception	- Accurate risk-perception a) quick and effective reaction time b)proactive versus reactive driving action c) expectations of other roadusers d) consequences of not doing what other road-users except e) Safe time margins  - Factors that affect driver risk perception	Describe the most common crash situations
1C  ✓ Understand the hierarchy of the Highway Transportation System	- Highway Transportation System a) Interstate b) United State highway c) State highway d) County road e) City street f) Alley	List and explain the hierarchy of U.S. roads and their various configurations
1D ✓ Accurate perception of personal limits, abilities, and risk tolerance	- Different types of drivers  - Dangerous driving     a) aggressive driving     b) street racing     c) personal and social     consequences     d) legal and economic     consequences  - Personal risk-tolerance     a) caution versus risk     b) proactive versus reactive     driving action     c) role of overconfidence and     under-confidence in inaccurate     risk-perception     d) risk-aversion in personal value     system	<ul> <li>Explain how perception of your driving ability can influence crash involvement</li> <li>Identify and explain personal limits and abilities</li> <li>Explain perceived level of risk for various situations</li> <li>Consistently demonstrated appropriate risk-management strategies, habits, and attitudes</li> </ul>

1. Understanding and Managing Risk
Purpose: To develop knowledge, appreciation, and skills related to perception and management of risk and how these skills and ability contribute to safe, responsible, and incident-free driving.

Teaching Objective	Topics	Knowledge Outcomes and Abilities
	e) develop rational personal risk preferences	
1E  ✓ Recognition and avoidance of crash situations	- Common crash factors for beginning drivers  a) inappropriate speed b) risk tolerance c) risk perception d) inappropriate risk-taking e) driver skill f) driver experience g) peer pressure h) overconfidence i) hazardous driving conditions j) poor attention management k) not looking for hazards l) inability to recognize hazards m) distracted driving o) impaired driving	<ul> <li>Consistently demonstrate good decision-making and driving skills to reduce the risk.</li> <li>List the common reasons for crashes among various driving demographics</li> </ul>
1F  ✓ Identification of potential hazards and effective response to hazards	- Common reasons for crash  - Potential hazards of driving and effective responses  a) vehicle malfunctions b) weather/environment conditions c) road conditions d) vehicle conditions e) distractions inside the vehicle f) distractions outside the vehicle g) other road-users h) unpredictable driving behavior i) driving error resulting in danger to self and to other road users	List possible hazards of driving     Describe effective responses to potential hazards of driving
1G  ✓ Effective decision- making to ensure safe driving	<ul> <li>Hazard perception, decision-making, and judgment</li> <li>Effects of impairment of decision – making skills</li> <li>Role of personal motives on decision-making skills</li> <li>Post-incident decision-making to ensure personal safety</li> </ul>	<ul> <li>Describe different decision-making skills and models</li> <li>Consistently demonstrate appropriate decision-making to ensure safe driving habits</li> </ul>
1H  ✓ Recognition and avoidance of crash situations	Common crash factors for beginner drivers     a) inappropriate speed     b) risk tolerance     c) risk perception     d) inappropriate risk-taking     e) driver skill     f) driver experience	<ul> <li>List common crash factors for beginner drivers</li> <li>Describe the most common crash situations</li> <li>Consistently demonstrate good decision-making and driving skills to reduce the</li> </ul>

1. Understanding and Managing Risk
Purpose: To develop knowledge, appreciation, and skills related to perception and management of risk and how these skills and ability contribute to safe, responsible, and incident-free driving.

Teaching Objective	Topics	Knowledge Outcomes and Abilities
	g) peer pressure h) overconfidence i) hazardous driving conditions j) poor attention management k) not looking for hazards l) inability to recognize hazards m) distracted driving n)dangerous driving o)impaired driving	risk

# **Standard 2 – The Vehicle Components**

# 2. The Vehicle Components

**Purpose:** To develop knowledge, appreciation, and skills related to the vehicle and its basic components and safely features and how they contribute to safe, responsible, and incident-free driving.

Teaching Objective	Topics	Knowledge Outcomes and Abilities	
2A  ✓ Consistent and proper use of safety restraint systems	- Law of physics  a) momentum  b) inertia  c) kinetic energy  d) gravity  e) friction  f) force of impact  Proper safety belt position  Jurisdictional laws	<ul> <li>Explain the basic laws of physics and how they affect the outcome of a crash</li> <li>Explain the proper position and of safety restraint systems</li> <li>Explain the jurisdictional-specific safety belt laws</li> </ul>	
2B  ✓ Safe and proper use of basic vehicle components	- Basic vehicle components  a) control devices  b) instruments and warning indicators  c) devices that aid visibility  d) safety devices  e) comfort devices  f) anti-theft devices  g) communication devices  h) traction control devices	<ul> <li>Locate and identify basic vehicle components</li> <li>Explain and its effect on safe driving</li> <li>Consistently demonstrate proper and safe use of all the importance of each basic vehicle component basic vehicle components</li> </ul>	
Safe and proper pre-trip checks     Safe and responsible vehicle control     Safe and responsible use of traction and other driver inputs     Safe and responsible driving to avoid crashes	- Pre-trip checks a) external checks b) internal checks - Controlling the vehicle safely and responsibly a) visual tracking b) steering control c) seating position d) starting and accelerating e) speed control f) deceleration and braking g) parking brake h) parking i) changing direction j) right-of-way maneuvers k) turns l) highway and freeway driving m) urban and rural driving - Traction a) time management b) space management c) stopping distances d) braking distances e) following too closely - Friction	<ul> <li>Conduct pre-trip checks properly and safely</li> <li>Explain the importance of vehicle control and its effect on safe driving</li> <li>Consistently demonstrate safe, responsible, and proper driving techniques and vehicle control in a variety of situations that require different applications of skills</li> <li>Explain reasons for using/avoiding specific driving techniques</li> <li>Explain the role of traction in vehicle handling</li> <li>Consistently locate appropriate point of brake application under various conditions and situations</li> <li>Explain the role of friction under various conditions</li> <li>Consistently demonstrate caution in driving behavior to compensate for different conditions.</li> <li>Describe appropriate and avoid crashes evasive maneuvers inappropriate situations for applying evasive maneuvers</li> <li>List basic evasive maneuvers and</li> </ul>	

2. The Vehicle Components

Purpose: To develop knowledge, appreciation, and skills related to the vehicle and its basic components and safely features and how they contribute to safe, responsible, and incident-free driving.

Teaching Objective	Topics	Knowledge Outcomes and Abilities
	a) speed for conditions b) affect of road surfaces on stopping c) seasonal changes and road surfaces d) tire types and conditions	describe how to apply them in order to avoid crashes
	<ul><li>Benefits of proper tire inflation</li><li>Common reasons for crashes</li></ul>	
	Crash avoidance and basic evasive maneuvers	

# Standard 3 – Vehicle Handling

# 3. Vehicle Handling

**Purpose:** To develop knowledge, appreciation, and skills related to vehicle handling and how it contributes to safe and responsible driving

contributes to safe and responsible driving			
Teaching Objective	Topics	Knowledge Outcomes and Abilities	
3A ✓ Safe and responsible vehicle control  3B ✓ Safe and responsible handling of the vehicle under various conditions	- Controlling the vehicle safely and responsibly  a) hand position b) visual tracking c) steering control d) seating position e) starting and acceleratin g f) speed control g) deceleration and braking h) parking brake i) parking j) changing direction k) turns l) following distance  - Traction a) weight management b) time management c) space management d) stopping distances e) braking distances f) following too closely g) speed for conditions h) affect of road surfaces on stopping i) seasonal changes and	- Explain the importance of vehicle control and its effect on safe driving - Consistently demonstrate safe, responsible, and proper driving techniques and vehicle control in a variety of situations that require different applications of skills - Explain reasons for using/avoiding specific driving techniques  - Explain the role of balanced weight in vehicle handling - Explain the role of traction in vehicle handling - Consistently locate appropriate point of brake application under various conditions - Explain the role of friction under various conditions - Consistently demonstrate caution in driving behavior to compensate for different conditions	
3C ✓ Safe and responsible driving to avoid crashes	road surfaces j) tire types and conditions  - Benefits of proper tire inflation  - Crash avoidance habits and basic evasive maneuvers	Describe appropriate and inappropriate situations for applying evasive maneuvers     List basic evasive maneuvers and describe how to apply them in order to avoid crashes	

3. Vehicle Handling
Purpose: To develop knowledge, appreciation, and skills related to vehicle handling and how it contributes to safe and responsible driving

Teaching Objective	Topics	Knowledge Outcomes and Abilities
3D  ✓ Detection and recovery from skidding and sliding	- Principles of skid control and slide control	<ul> <li>Explain the principles of skid control and slide control</li> <li>Describe situations under which brake lock-up might occur and how to recover from skidding and sliding</li> <li>Describe the likely emotions of losing control beyond the point of no return</li> </ul>

# **Standard 4 – Perception and Risk Management**

Standard 4 – Perception and Risk Management

Purpose: To develop knowledge, appreciation, and skills related to perception and risk management and how they contribute to safe and responsible driving

Teaching Objective	Topics	Knowledge Outcomes and Abilities
4A ✓ Safe and proper observation skills	- What and where to observe and when  a) 360 degree vision b) distance scanning and judgment c) peripheral vision d) blind spots e) visual obstructions f) limits of observation - How to observe a) active attention b) shoulder checks c) peripheral vision d) mirrors - Visual search and scanning to detect potential hazards from typical occurrences b) scanning patterns under all conditions c) detecting potential path deviations	Consistently demonstrate safe, responsible, and proper observation skills     Consistently focus on appropriate visual targets while scanning the environment     Consistently demonstrate potential hazard detection by means of visual scanning     Explain the parts of vision and their specific uses
4B  ✓ Identification of potential hazards and effective response to hazards	Potential hazards of driving and effective responses     a) vehicle malfunctions     b) weather/environmental conditions     c) road conditions     d) vehicle conditions     e) distractions inside the vehicle     f) distractions outside the vehicle     g) other road-users     h) unpredictable driving behavior     i) driving error resulting in danger to self and to other road-users	<ul> <li>List possible hazards of driving</li> <li>Describe effective responses to potential hazards of driving</li> </ul>

Standard 4 – Perception and Risk Management

Purpose: To develop knowledge, appreciation, and skills related to perception and risk management and how they contribute to safe and responsible driving

Teaching Objective	Topics	Knowledge Outcomes and Abilities
	-	<u> </u>
4C	- Hazard perception, decision-	Describe different decision-making skills
✓ Effective decision-making to	making, and judgment	
ensure safe driving		<ul> <li>Consistently demonstrate appropriate</li> </ul>
	<ul> <li>Using decision-making skills to</li> </ul>	decision-making to ensure safe driving
	drive safely	<ul> <li>Describe the affects of driver-impairment on</li> </ul>
	<ul> <li>a) evaluate whether or</li> </ul>	decision-making
	not to drive	
	<ul><li>b) anticipate what might</li></ul>	
	happen	
	c) predict possible	
	solutions	
	d) prioritize situations and	
	solutions	
	e) make appropriate	
	choices under pressure	
	f) identify consequences	
	g) make multiple decisions	
	quickly	
	h) develop a hierarchy of	
	responses to various	
	situations and	
	alternative responses	
	<ul> <li>Effects of impairment on decision-</li> </ul>	
	making skills	

### Standard 5 - Rules of the Road

# 5.Rules of the Road

Purpose: To develop knowledge, appreciation, and skills related to the rules of the road how they contribute to safe, responsible, and incident-free driving

	<del>_</del>	
Teaching Objective	Topics	Knowledge Outcomes and Abilities
5A  ✓ Compliance and cooperation with right of way laws	<ul> <li>Purpose of right of way laws and principles</li> <li>a) school buses</li> <li>b) emergency vehicles</li> <li>c) other motor vehicles</li> <li>d) pedestrians</li> </ul>	<ul> <li>Explain the rationale for right of way laws and principles</li> <li>Explain the jurisdictional specific right of way laws and principles</li> <li>Explain the importance of cooperation with school buses and emergency vehicles</li> </ul>
5B  ✓ Compliance with traffic laws and regulations as a foundation for safe and responsible driving	<ul> <li>Traffic laws and regulations reasons for traffic laws and regulations</li> <li>a) current road safety issues</li> <li>b) speed</li> <li>c) impaired driving</li> <li>d) distracted driving</li> <li>e) emergency vehicles</li> <li>f) licensing requirements</li> <li>g) vehicle insurance</li> </ul>	<ul> <li>Explain the rationale for traffic laws and regulations and how they contribute to road safety</li> <li>Describe a current road safety issue and how traffic laws and regulations address the issue</li> <li>Consistently demonstrate proper and safe response to all rules of the road</li> </ul>
5C  ✓ Compliance with traffic control devices as a foundation for safe and responsible driving	Traffic control devices     a) signs     b) signals     c) markings	<ul> <li>Explain the rationale for traffic control devices in general and how they contribute to road safety</li> <li>Recognize and describe the prominent characteristics of common traffic control devices and explain the specific meaning and purpose for each</li> <li>Consistently demonstrate proper and safe response to all traffic control devices</li> </ul>

### **Standard 6 – Driver Behavior**

# 6. Driver Behavior

**Purpose:** To develop knowledge, appreciation, and skills related to driver behavior and how it contributes to safe, responsible, and incident-free driving

<b>—</b>	<del>-</del> -	1/ 1 0 / 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Teaching Objective	Topics	Knowledge Outcomes and Abilities
6A  ✓ Accurate assessment of driving environments and road conditions and appropriate adjustment of driving behavior	<ul> <li>Adjusting driving behavior for different driving conditions.</li> </ul>	Consistently and appropriately adjust driving behavior based on driving environment and road conditions.
6B  ✓ Controlled emotional reactions related to driving	Control over emotions     a) potential effects on driver decision-making     b) recognizing internal cues and control responses	<ul> <li>List types and sources of emotion</li> <li>Explain how emotions relate to driver decision-making.</li> <li>Describe driving strategies for dealing with emotion and relate preferred strategies and styles to personal values.</li> <li>Consistently demonstrate appropriate control over emotion.</li> </ul>
6C  ✓ Positive driving attitudes and behavior.	<ul> <li>Personal factors and influence         <ul> <li>a) personal driving values and beliefs</li> <li>b) motives that influence driving</li> <li>c) how motives change under different circumstances</li> <li>d)how values, beliefs, and motives influence attitudes toward driving.</li> </ul> </li> <li>Social Factors and influence         <ul> <li>a) influence of advertising</li> <li>b societal attitudes towards cars and driving</li> <li>c) influence of other people's driving habits</li> <li>d) peer pressure an driving</li> </ul> </li> <li>Resisting negative pressures         <ul> <li>a) personal value of resisting negative pressures</li> <li>b) resist negative informal pressures</li> <li>c) resist negative media and commercial messages</li> <li>d) entertainment media use of driving imagery</li> </ul> </li> <li>Positive driving attitudes         <ul> <li>a) driving is a privilege not a right</li> <li>b) overcoming negative motives</li> <li>c) driving courteously</li> <li>d) cooperative driving</li> </ul> </li> </ul>	<ul> <li>Explain how positive and negative personal factors influence driving attitudes and behavior.</li> <li>List personal motivators and describe how each could positively and/or negatively influence personal driving attitudes and behavior.</li> <li>Explain how positive and negative social factors influence driving attitudes and behavior.</li> <li>Describe effective strategies for resisting negative pressures.</li> <li>Explain how positive driving attitudes result in safe and responsible driving behavior</li> </ul>

# 6. Driver Behavior

**Purpose:** To develop knowledge, appreciation, and skills related to driver behavior and how it contributes to safe, responsible, and incident-free driving

		T
Teaching Objective	Topics	Knowledge Outcomes and Abilities
	<ul> <li>Impact of driver behavior on other</li> </ul>	
	road users.	
6D  ✓ Responsible and informed decision-making	Decision-making     a) how formal rules of the road, common safe practices of road-users, and informed decision-making contribute to safe and responsible driving     b) approaches to decision-making     c) importance of good decision-making     d) consequences of poor decision-making	<ul> <li>Explain the impact of decision-making on driving</li> <li>Consistently demonstrate appropriate decision-making</li> <li>.</li> </ul>
6E  ✓ Respect for the environment as it relates to operating a vehicle	- Environmentally conscious and efficient driving behavior  a) fuel efficiency b) mandatory emissions testing c) proper disposal of cars, fluids, batteries, and tires d) littering e) planning safer and more efficient activities and routes f) economic benefits of driving efficiently	Explain how environmentally conscious driving contributes to safety and economic benefits
6F  ✓ Lifelong learning approach to driving	<ul> <li>The driver as a lifelong learner</li> <li>Factors that contribute to changes in driving skill</li> <li>a) changing motor vehicle technology</li> <li>b) changing driving practices and laws</li> <li>c) the aging driving population</li> </ul>	<ul> <li>Explain how different factors contribute to changes in driver skill and why driving is a lifelong learning process</li> <li>Identify opportunities for lifelong learning related to driving</li> </ul>

# Standard 7 - Sharing the Road

# 7. Sharing the Road

**Purpose:** To develop knowledge, appreciation, and skills to related to effectively interacting with other road-users and how it contributes to safe, responsible, and incident-free driving

Teaching Objective	Topics	Knowledge Outcomes and Abilities
7A  ✓ Cooperative driving	<ul> <li>Cooperative driving <ul> <li>a) sharing the road in a safe and considerate manner</li> <li>b) respecting other road-users</li> <li>c) understanding other road-users needs</li> <li>d) passing safely</li> <li>e) space management</li> <li>f) benefits of cooperative and courteous driving</li> <li>g) sharing the road with school buses</li> <li>h) sharing the road with commercial vehicles</li> <li>i) cooperative interstate driving</li> </ul> </li> </ul>	<ul> <li>Explain the difference between cooperative driving and defensive driving.</li> <li>Explain the benefits of cooperative driving</li> <li>Consistently demonstrate ability to predict and anticipate the behaviors of other road-users</li> </ul>
7B  ✓ Appropriate communication with other road-users	Communicating effectively with other road-users     Habits and attitudes related to effective communication     a) consistently communicate driving intentions     b) adjusting communication based on observation of the driving environment and other road-users	<ul> <li>Explain why appropriate communication is essential for an orderly and safe road system</li> <li>Consistently demonstrate appropriate communication with other road-users in a variety of driving situations</li> </ul>

### Standard 8 – Attention

# 8. Attention

**Purpose:** To develop knowledge, appreciation, and skills to related to attention and how it contributes to safe, responsible, and incident-free driving

Teaching Objective	Topics	Knowledge Outcomes and Abilities
8A  ✓ Safe and responsible actions related to impaired driving	<ul> <li>Types of impairment <ul> <li>a) drug</li> <li>b) alcohol</li> <li>c) fatigue</li> <li>d) drowsy driving</li> <li>e) illness</li> <li>f) medication</li> <li>g) mental stress</li> <li>h) combination of multiple impairments</li> </ul> </li> <li>Effects of impairment <ul> <li>a) impaired judgment</li> <li>b) lack of attention/alertness</li> </ul> </li> <li>Myths and facts related to impairment</li> <li>Consequences of impaired driving <ul> <li>a) personal and social consequences</li> <li>b) legal and economic consequences</li> </ul> </li> </ul>	Describe symptoms and effects of impairment, mythical remedies for driver alertness, consequences of impaired driving, and appropriate strategies for addressing impairment
8B  ✓ Managed driver  distraction	<ul> <li>Distracted driving</li> <li>a) distraction inside the vehicle</li> <li>b) distractions outside the vehicle</li> </ul>	<ul> <li>List potential distractions inside and outside the vehicle</li> <li>Explain how distractions affect driving</li> <li>Consistently demonstrate effective management of driver distractions</li> </ul>
8C  ✓ Managed division of attention	<ul> <li>Managing attention</li> <li>a) switching attention</li> <li>b) divided attention</li> <li>c) focused attention</li> <li>d) sustained attention</li> </ul>	<ul> <li>Describe strategies for managing attention</li> <li>Consistently demonstrate effective management of attention</li> </ul>

# Standard 9- Respect and Responsibility

9. Respect and responsibility
 Purpose: To develop knowledge, appreciation, and skills to related to respectful and responsible driving attitudes and how they contribute to safe, responsible, and incident-free driving

Teaching Objective	Topics	Knowledge Outcomes and Abilities		
9A  ✓ Safe and responsible response to emergency situations	<ul> <li>Responding to emergency situations</li> <li>a) minor or major motor vehicle crashes</li> <li>b) arriving at the scene of a crash</li> <li>c) being stopped by a law enforcement officer</li> <li>d) yielding to an emergency vehicle</li> <li>e) vehicle malfunctions</li> </ul>	Describe how to safely and responsibly handle a motor vehicle crash and emergency situations.		
9B  ✓ Leadership in promoting safe driving	<ul> <li>Being a safe, respectful, and responsible driver         <ul> <li>a) being a leader in safety restraint use and promote it in others</li> <li>b) being fit to drive and promote it in others</li> <li>c) being caring and empathetic towards other road-users</li> </ul> </li> <li>Conflict avoidance regardless of fault a) respecting other road-users' safety margins         <ul> <li>b) avoiding road rage in yourself and others</li> </ul> </li> </ul>	<ul> <li>Explain how leadership, safe behaviors, and respect for other road-users contribute to safe and responsible driving.</li> <li>Consistently demonstrate leadership, safe behaviors and respect for other road-users.</li> </ul>		
9C  ✓ Respect for the environment as it relates to operating a vehicle	- Environmentally conscious and efficient driving behavior  a) fuel efficiency b) mandatory emissions testing c) proper disposal of cars, fluids, batteries, and tires d) littering e) planning safer and more efficient activities and routes f) economic benefits of driving efficiently	Explain how environmentally conscious driving contributes to safety and economic benefits		
9D  ✓ Lifelong learning approach to driving	<ul> <li>The driver as a lifelong learner</li> <li>Factors that contribute to changes in driving skill <ul> <li>a) changing motor vehicle technology</li> <li>b) changing driving practices and laws</li> <li>c) the aging driving population</li> </ul> </li> </ul>	<ul> <li>Explain how different factors contribute to changes in driver skill and why driving is a lifelong learning process</li> <li>opportunities for lifelong learning related to driving</li> </ul>		

### **Appendix A – Required Topics: Examples**

It is expected that curriculum developers (or implementers of professional curricula) will expand on the required topic headings appropriately when developing the curriculum. The table below includes examples of how the required topics could be expanded. These examples are for illustrative purposes only and are not intended to be exhaustive. Also, specific jurisdictional topics will need to be included.

### Standard 1 Understanding and Managing Risk

- Jurisdictional-specific license qualifications
- Graduated drivers licensing systems
- License suspension and revocation
- Registered owners' responsibilities
- Safety restraint use
- Insurance
- Impaired driving
- Graduated drivers license
- Parental involvement
- Hierarchy of roads in highway transportation system
- Safety features of roadways
- Safety features of vehicles

#### **Standard 2 The Vehicle and its Components**

- Laws of physics
- Pedal operation
- Ignition switch
- Manual vs. automatic transmission
- Gearshift for automatic transmission
- Gearshift for manual transmission
- Clutch pedal for manual transmission
- Steering wheel
- Accelerator (gas pedal)
- Various cruise control devices
- Avoiding the use of cruise control devices on wet, slippery road surfaces, in the early stages
  of driving, and in urban traffic
- Brake pedal
- Types of brakes
- Antilock braking systems
- Parking brake
- Electronic stability control systems
- New technologies
- Speedometer and odometer
- Fuel gauge
- Alternator gauge or warning light
- Temperature gauge or warning light
- Oil-pressure gauge or warning light
- Brake warning light (ABS)
- Check engine light
- Other dashboard lights
- Lights (day and night)
- Windshield wipers and washer fluid
- Sun visor

- Defroster/Defogger
- Rear-view and side-view mirrors
- Air bags and restrictions
- Seat belts
- Head restraints
- Infant/child restraint systems
- Door locks
- Structural features
- Seat-position controls
- Steering wheel
- Air conditioner and heater air vents
- Ignition buzzer
- Locks
- Alarms and other anti-theft devices
- Taillights
- Directional (turn) signals
- Emergency flashers (hazard lights)
- Parking lights
- Horn
- Pressure
- Wear pattern
- Tread depth
- Vehicle body
- Exterior lights
- Lights
- Exhaust system
- Fluid levels
- Under the hood
- Dash board
- Fluid level alerts
- Fuel level
- Brakes
- Seat belts
- Spare tire and tire changing equipment
- How to change a tire
- First aid kit
- Emergency kit

#### Standard 3 Vehicle Handling

- Smooth steering control
- Proper hand positioning
- Display steady lane tracking
- Maintaining optimal lane position
- Proper foot position
- Holding steady pressure at moderate levels
- Variation in cruise speed
- Benefits of steady speed control (e.g., fuel efficiency)
- Early deceleration
- Benefits/hazards
- Smooth deceleration
- Correct braking techniques
- Smooth time-limited braking

- Steady light braking and holding stop on different grades
- · Moderate impact braking
- Emergency braking control
- Relationship between proper seating position and braking
- Driving characteristics of conventional and anti-lock brake systems
- Stall parking (forward and reverse)
- Hill parking (up and down)
- Angle parking
- Parallel parking
- Shoulder parking
- Yielding
- · Crossing intersections
- Merging
- Changing lanes and passing
- Maintaining correct lane tracking
- Backing-up
- Yielding
- Crossing intersections
- Merging
- Changing lanes and passing
- Maintaining correct lane tracking
- Backing-up
- Stop signs
- Two- and four-way stops
- Traffic circles
- Yield signs
- Controlled and uncontrolled intersections
- T-intersections
- Malfunctioning traffic control devices
- Emergency vehicles
- Left and right turns
- Three-point turns
- Maintaining correct lane tracking
- Entering and exiting
- Curves
- Shoulders
- Camber and grade of road
- Passing
- Changing lanes
- Speed and its relationship to time and stopping distances
- Space management (front, rear, side)
- Dry
- Oily
- Damp or wet
- Icy or snowy
- Recognize critical situations requiring emergency evasion maneuvers
- Wheels-off-road recovery
- Head-on collision avoidance
- Rear-end collision avoidance
- Optimal emergency braking control
- Proper seating position

- Threshold braking modulation
- Maximum braking
- Detection and recovery
- · Selecting the correct control actions in terms of both braking and steering
- Steering response
- Steering follows eyes, rapid and smooth release of wheels
- Alternate steering wheel hand positions
- Brake release and shift to neutral
- · Controlling skids/slides with
- Front wheel drive/conventional power brakes
- Rear wheel drive/conventional power brakes
- Front wheel drive/ABS
- Rear wheel drive/ABS
- Four-wheel drive vehicles vs. two-wheel drive vehicles

### Standard 4 Perception and Risk Management

- Parts of vision
- Use of parts of vision
- Safe margins (front, rear, side)
- Safe driving speeds
- Braking and stopping safely
- Emergency braking control
- Accelerating safely
- Using the brake and horn
- Yielding if uncertain
- Point of no return
- Impaired driving

#### Standard 5 Rules of the road

- The Highway Transportation System
- Principles of right of way
- Uniquely shaped signs
- Interpretation of signs
- Stop sign
- Yield sign
- Speed limit sign
- School zone sign
- Construction zone sign
- Railway crossing sign
- High Occupancy Vehicle (HOV) sign
- Temporary condition sign (i.e., weather, construction)
- Regulatory sign
- Warning sign
- Information and direction sign
- Children with special needs sign
- Children playing sign
- Emergency response sign
- Bilingual sign
- Animal warning sign
- Community safety signs
- Pedestrian signals
- Motor vehicle signals
- Accessibility features

- Traffic officer directions
- Lane-use lights
- Chevrons
- Arrows
- Bicycle
- Crosswalks
- Stop lines
- Railroad crossing
- Accessibility
- Traffic light configurations
- Drinking and driving penalties
- Passing on the right

#### Standard 6 Driver Behavior

- Steering control
- Speed control
- Speed versus stopping distances
- Risk perception versus accurate knowledge of vehicle performance
- Road surface conditions
- Driving as thrill-seeking

# Standard 7 Sharing the Road

- Commercial vehicles
- School buses
- Cyclists and pedestrians
- Traffic control persons
- Large vehicles
- Slow-moving vehicles
- Motorcycles
- Animals
- Public transit vehicles
- Emergency vehicles
- Carpooling
- Vehicle signals
- Hand signals
- Horn
- Hazard lights
- Eye-to-eye contact
- Non-verbal communication
- Headlights
- Vehicle position

#### Standard 8 Attention

- Drinking and driving
- Eating and drinking
- Applying make-up
- Other passengers
- Pets
- Children
- Insects
- Loud noises
- Mobile communication devices (e.g., phone calls, text messaging)

- Advertising
- Animals
- Collisions
- Construction sites
- People
- Ability to choose to process relevant information while simultaneously tuning out irrelevant information
- Vigilance, concentration
- Ability to persist or maintain a consistent response set over time involves two aspects of performance: length of time or duration of performance and the consistency of performance during the time period
- · Shifting attention, mental flexibility
- Ability to easily shift one's focus from one activity or stimuli to another
- Mental tracking
- Ability to internally hold onto several pieces of information at once

### Standard 9 Respect and Responsibility

- Insurance and financial risk
- Ensure personal safety first
- Pull to the side of the road (if possible)
- Stop immediately
- Warn others if possible
- Call for medical help if necessary
- Call the police
- Exchange information
- Get names and addresses of witnesses
- Stay at the scene
- Make accident reports (if required)
- Go to collision reporting centre (where available)
- See a doctor (if you have been injured)
- Pull safely to the side of the road
- Have license and registration available
- How to purchase a fuel efficient vehicle
- Following manufacturer's recommended maintenance schedule
- Poorly maintained vehicles can consume more fuel
- Keeping tires inflated at the manufacturer's recommended pressure
- How and when to measure tire pressure
- Under-inflated tires can increase fuel consumption
- Avoiding unnecessary idling
- Effects of speed on fuel consumption
- Alternative fuels and technologies
- Skills will deteriorate unless effort is made to keep them sharp
- Monitor changes in personal driving skills and adapt driving behavior to compensate for changes in skills
- How feedback can help drivers improve their skills